

MANUFACTURERS' RECORD

A WEEKLY REVIEW OF THE IRON, STEEL, METAL & HARDWARE TRADES.

AND A MANUFACTURING AND TEXTILE PAPER, DEVOTED TO THE UPBUILDING OF SOUTHERN MANUFACTURES AND THE DEVELOPMENT OF THE MATERIAL RESOURCES OF THE SOUTH.

WEEKLY. }
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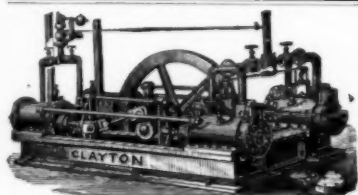
BALTIMORE, MARCH 29, 1884.

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VOL. V. No. 7.

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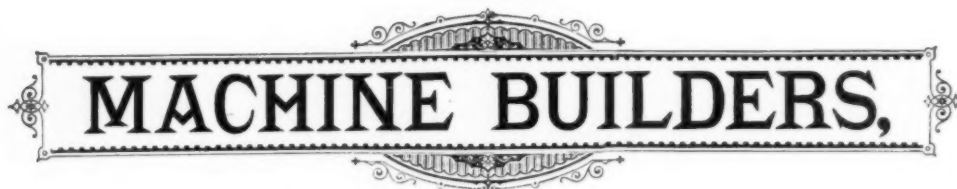
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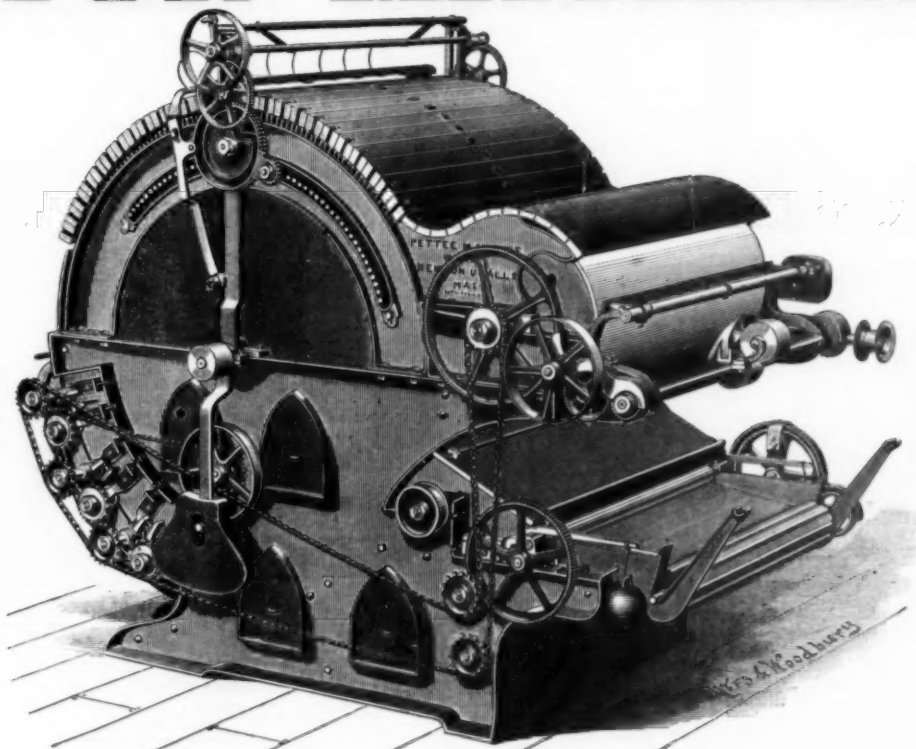
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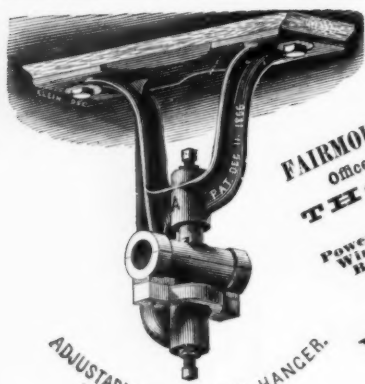
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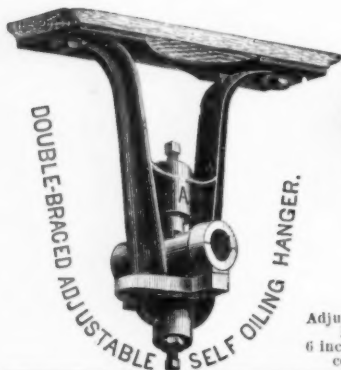
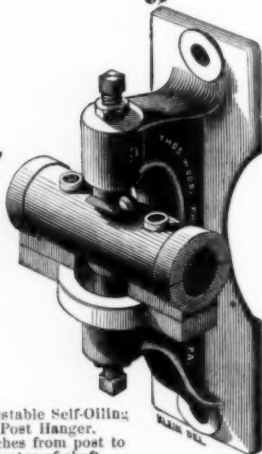
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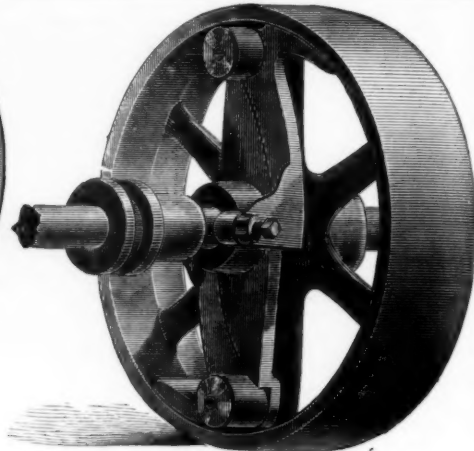
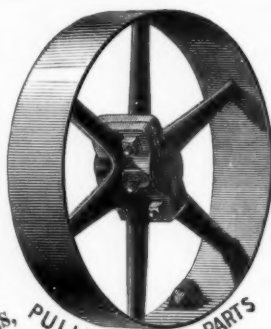
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16, 18 and 20 yards Circumference,
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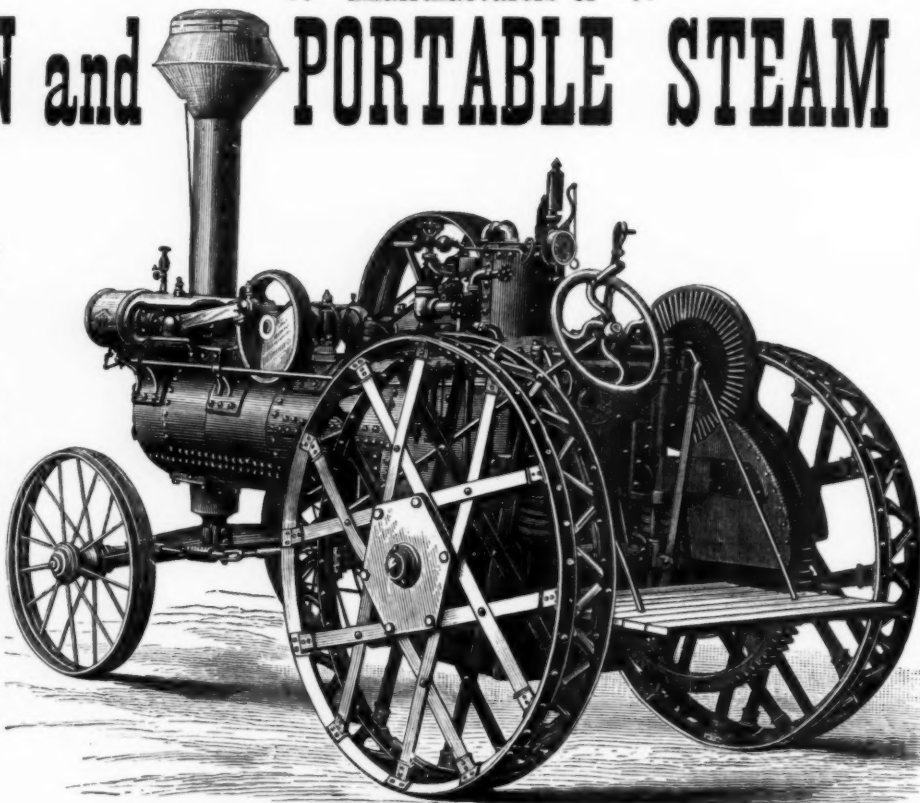
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are capable of taking care of all
the grain that can be gotten to
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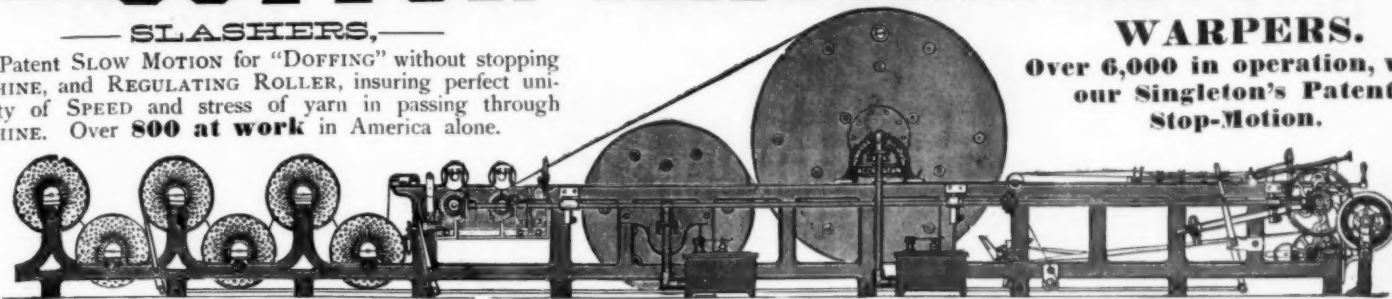
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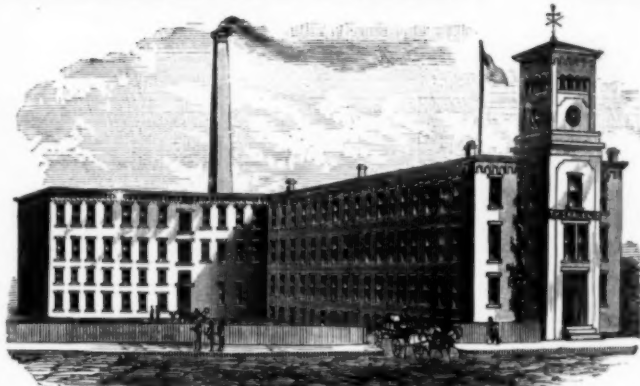
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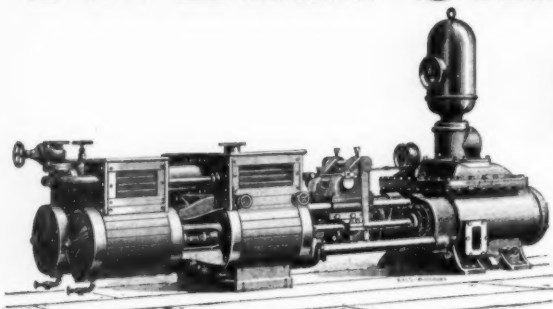
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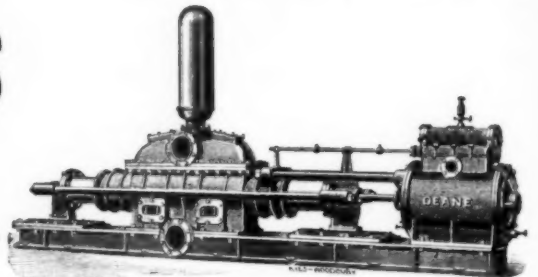
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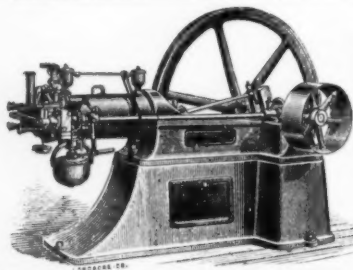
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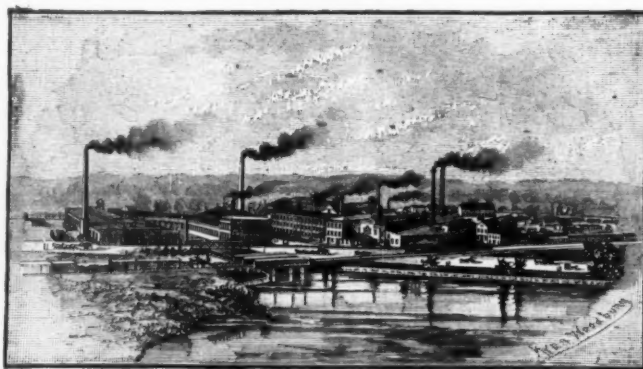
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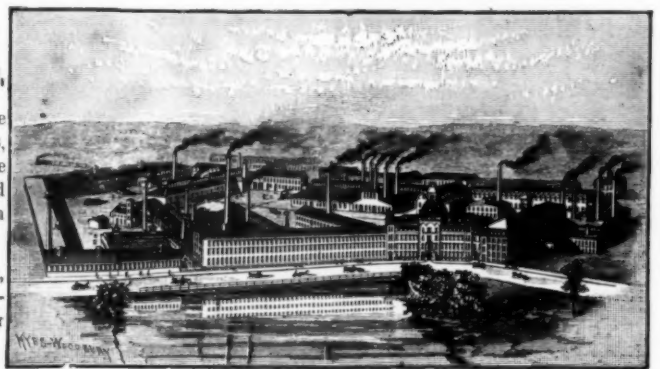
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Reading Notices 50 cents per line each insertion.

BALTIMORE, MARCH 20, 1884.

CORRESPONDENCE relating to the manufacturing, mining, lumbering and all other material interests of the Southern States is solicited. We invite those interested in the development of the South to make free use of our columns. Reaching so many capitalists in all parts of the United States seeking profitable investment in the South, the MANUFACTURERS' RECORD offers an excellent chance for the people in that section to place the advantages of each locality before those likely to be interested. We will take great pleasure at all times in telling what has already been accomplished in the South, and showing up the opportunities of doing still more,—so if you desire to attract immigration or capital, or if you know of an opening for profitable investment in manufacturing, mining or kindred pursuits, write us an account of it. It will be published free of cost.

MR. F. W. GRIFFIN, the secretary of the Manufacturers & Mechanics' Institute, of Boston, and others, have organized the International Land and Colonization Society, with a capital of \$125,000, for the purpose of buying large bodies of land in the South, to be divided up and sold in small parcels to immigrants. The company will endeavor to attract a large immigration from Europe, as well as from the Northern States. The organization of this company is simply another evidence of the interest that is centering in the South, and of the disposition of capitalists to invest in that section.

THE Mobile Register has donned a new spring dress, giving evidence of its prosperity. The Register is one of the best of Southern papers, published in one of the most attractive of Southern towns.

The South's Interest in a Protective Tariff.

That the sentiment in favor of a protective tariff is very rapidly spreading in the South is so evident that the most pronounced free-trader cannot shut his eyes to the fact. The traditions and teachings of the past among Southern people were mainly for free trade, and, drifting along with that current, the writer of this, in former years, regarded a belief in that doctrine as essential to all who were interested in the progress of the Southern States. Our convictions upon this important question, however, were entirely changed long before there were any signs of the revolution that is now seen in the sentiment of the South upon the tariff question, and it affords us much pleasure to know that the MANUFACTURERS' RECORD has been one of the leaders in educating the Southern people to the great importance to them of a protective tariff.

There are none so foolish as to deny that the building up of the vast manufacturing interests of the North and West is due mainly to a protective tariff, and under that tariff those sections have prospered and grown wealthy more rapidly, probably, than the world had ever seen up to a year or so ago. With the growth of manufactures there has been a steady development of the railroad and the agricultural interests. The increase in population, wealth, and all that goes to build up a civilized nation, in the North and West, has been one of the most stupendous wonders the world has ever witnessed. Whatever may be our political opinions or party affiliations, we are bound to admit that this marvellous development has demonstrated beyond the shadow of a doubt that a protective tariff has been a blessing to the North and West. Now, if this tariff has resulted in such great good to those sections, and the South is about to share in its great benefits, why should there be any in this section who are willing to sacrifice the future of their country, its growth and prosperity, simply that they may adhere to their idols of the past.

Already the South has started on a career of prosperity that bids fair to make her the richest country that the sun ever looked down upon, and even Mr. Jay Gould admits that the South is to-day making "more rapid progress than New England ever did in her palmy days." From one end of the South to the other there is throbbing a new life. Old things are passing away, and day by day we see the South growing richer, and stronger, and more populous. Millions and tens of millions of dollars are going into Southern industrial enterprises every month, and the outlook now is brilliant almost beyond human conception. Every new factory started and every mile of railroad built are adding not only to the aggregate wealth of the South, but

they are enhancing the value of all adjacent property; they are building up a home market for the products of the farm and opening up dozens of new ways by which the farmers of the South can free themselves from the chains of their great curse—the all-cotton system.

With the growth of these new industries, diversified agriculture in its broadest sense opens up to the Southern farmer many avenues of profit, while it affords remunerative employment to thousands of idle hands—idle because they could find nothing to do. It is hardly possible to conceive of any country making more rapid substantial progress than we now see in the South. All this is being done under a protective tariff. Would it not be wise to let well enough alone, and for the people of the South to refuse longer to be led by those who seek to break down this system, the breaking down of which would inevitably check the advance now being made by the Southern States.

The Proper Credit.

In all things it is well to give credit where credit is due. Some weeks ago the writer had occasion to insert an advertisement in several newspapers of large circulation, and in reply received quite a number of letters, and out of the entire number, there were, we believe, less than half a dozen in which any reference was made to the paper in which the advertisement was seen. As so few of the writers mentioned in their letters where the advertisement had been noticed, we could not, of course, be certain as to how much good each paper had done us.

Advertisers are always anxious to know just how many letters of inquiry each paper in which their card is placed brings them, so that they can confine their advertising in the future to such papers as pay them; while it is particularly important for newspapers that they should receive full credit for all the good that they do for the business men who patronize them. Hence it is a matter of considerable moment that when a reader sees an advertisement in a newspaper and desires to purchase any of the goods advertised, or if he only wishes to obtain price-lists or catalogues, that he mention in his letter the name of the paper in which the advertisement was seen. By doing this a favor will be conferred upon the advertisers, as well as upon the newspaper.

THE Bitter-Sweet, of Kissimmee City, Fla., reports a rapid growth of that attractive city, with an unusual large number of houses now under construction. The prospects for Kissimmee's future, based on its very superior natural advantages and transportation facilities, are said to be remarkably good.

Mr. Gould's Views about the South.

Mr. Jay Gould is undoubtedly well able to judge of the South's industrial future, and hence his views upon that subject must carry considerable weight. In a late interview he said that the Southern States have made such progress since the war as was never made by New England, even in her palmy days. While the politicians have been berating that section her people continued at work, until now the business world is awaking to the fact that the progress of the South is enchainning the attention of capitalists everywhere. The mountain section south of the Blue Ridge, from North Carolina across to the Mississippi, is bound to become the greatest manufacturing country in the world, and Atlanta and Birmingham will be cities with population of half a million each. The outlook for cotton manufacture, freighted, as it is, with wealth, will be eclipsed by the iron interests, which are truly marvellous. The two brightest public men in the South, who appreciate the full possibilities of the future, are Senator Brown, of Georgia, and Senator Jones, of Florida. Southern lands, both for agricultural and timber purposes, he considers one of the safest investments possible. Within five years Florida will supply the fruit market with tropical products. Pensacola, he says, will obtain rank as a seaport next after New Orleans.

THE Atlanta Constitution is not satisfied with our advice to Southern people that good management is essential to success in manufactures at the South, and wants to know why Northern manufacturers fail, and if their failure is due to a lack of experience. The Constitution has entirely mistaken our meaning. We stated that a large proportion of the failures that do occur among Southern manufacturers,—although we are glad to say the percentage of failures at the South is less than in the North,—are caused by bad management, or, in other words, there would be fewer failures even than there are if every factory had good, experienced managers. We only advised Southern people (and our advice was to Southerners only, simply because the MANUFACTURERS' RECORD is a Southern paper, working for the best interests of the South,) not to put their money into any new enterprise unless men of ability and experience were going to manage it. The editor of the MANUFACTURERS' RECORD is a Southerner, and possibly may know as much about the industrial interests of the South as the able editor of our Atlanta contemporary.

Our readers will confer a favor upon our advertisers and upon us, as well as benefit themselves, if, whenever they write to anyone advertising in this paper, if it is only for a catalogue, they mention that "your advertisement was seen in the BALTIMORE MANUFACTURERS' RECORD." A careful compliance with this request will be much appreciated.

CONSTRUCTION DEPARTMENT.

We publish, every week, a list of every new factory, of whatever kind, projected anywhere in the South; every railroad undertaken, and every mining company organized. This information is always fresh, and, by enabling manufacturers to correspond with the projectors of such enterprises before their supplies of machinery have been purchased, is of great value. Manufacturers will find it to their interest to read this department carefully each week.

MACHINERY in saw mill of Ligon & Griffin, Seney, Ga., badly damaged by explosion.

HERRING & RAND, Goldsboro, N. C., are building a new mill in Jones county, N. C., for Capt. E. R. Page.

SWEETWATER, TEXAS, expects to establish \$20,000 water-works.

REPORTED that the Juniata Quarrying and Manufacturing Co., Concord, Tenn., will erect building and machinery for sawing and dressing marble.

T. W. KEMPLIN, Grassy, Morgan county, Ky., is erecting a distillery.

THE Houston, East and West Texas Railway, Houston, Texas, it is reported, will at once erect large machine shops, round-house, &c.

INCORPORATED—The Kentucky Mining, Manufacturing & Construction Co.

EDWIN McDOWELL and others, Spartanburg, S. C., expect to start foundry. Will manufacture stoves, turbine wheels, &c.

COL. TOM PIERCE, of the Galveston, Harrisburg & San Antonio Railroad, speaking of the new railroad shops to be erected by his company at Houston, Texas, as reported last week, says they will be about 1,800 by 1,200 feet, and will cost about \$500,000.

MR. MAX KOSSE has received contract for the \$39,000 building for the Cotton Exchange, Houston, Texas.

THE M. T. Jones Lumber Co., Houston, Texas, will enlarge their mills.

GOVERNOR CAMERON, of Virginia, has vetoed the bill incorporating the Richmond Dock and Dry Dock Co.

THE Merchants' Exchange, San Antonio, Texas, expect to erect a \$50,000 building.

THE Nashville Cotton Mills, of Nashville, Tenn., organized in 1881, with a capital of \$100,000, propose to more than double their present capacity; will add 100 looms and other necessary machinery.

MR. JNO. L. ALLEN, Fayetteville, N. C., expects to enlarge his sash and furniture factory.

THE London and Buckingham Construction and Mining Co. has been incorporated in Virginia.

GEO. W. ANDREWS and John B. Scarborough will start canning factory at Mill Green, Md.

ARTHUR & BURTON, White Hall, Md., will establish carriage factory.

G. A. THOMPSON will put up saw mill at Thomasville, N. C.

THOMPSON & KINDLY, Thomasville, N. C., will enlarge flour mill, put in 60-horse power engine, &c.

A SAW mill is to be built at Micanopy, Fla.

PRESTON TAYLOR, Mt. Sterling, Ky., is buying machinery for steam laundry. R. W. Smith will also establish steam laundry in same place.

GEO. E. MACY, Orlando, Fla., has put up a grist mill.

THE Cypress Lumber Co., Apalachicola, Fla., are building a new saw mill.

MCBRIDE & Co., Palmetto, Ga., propose to put up cotton-seed oil mill at Newnan, Ga.

A STOCK company is forming to build new street railroad in Chattanooga. Mr. C. P. Robertson can give particulars.

PARKER & SMITH will start a brick yard at Augusta, Ga.

PROPOSALS are invited by president R. M. Mitchell, of Augusta, Ga., for grading 20 miles of railroad.

PROSPECTS are more encouraging for a cotton factory in Lynchburg. As previously reported, Northern capitalists offer to subscribe one-half of capital. Guggenheimer & Co., Lynchburg, can give particulars.

FOARD & PARTEE, Martinsville, Va., will increase supply of brick-making machinery.

NORTHERN capitalists are testing the gold mine near Carrollton, Ga., owned by Zadoc Bonner, with a view of purchasing at \$75,000.

FOUNDRI and machine shop will probably be established in Orlando, Fla.

NUTTY BROS., Bristol, Tenn., are enlarging their wool mill, adding new machinery, &c.

THE new hub and spoke factory, Scottsboro, Ala., is receiving its machinery.

MACHINE shops of the Jacksonville, Tampa & Key West Railroad will be located at Palatka, Fla.

A \$30,000 Masonic Hall is to be erected at Aberdeen, Miss.

ORGANIZED at Aberdeen, Miss.—Aberdeen Electric Light Co. Dr. J. W. Eckford, president; J. E. Ford, vice president; and C. C. Buckner, secretary.

THE Shuttle Factory, Winston, N. C., is adding general wood-working machinery.

G. L. MILLER, Winston, N. C., is enlarging his planing mill.

JOSEPH H. DURKEE and others, of Jacksonville, Fla., have incorporated the Normal and Industrial Institute for instruction in mechanics, &c.

TYSON & JONES, carriage builders, Carthage, N. C., will erect a new shop.

THE Centenary College Building, to cost \$100,000, will be erected at Lampasas, Texas.

CHARTERED—Dallas Belt Railroad Co., Dallas, Texas; capital, \$100,000.

J. T. JONES has received contract for water-works for Victoria, Texas, at \$38,200.

A Shuttle Block Factory is being erected in Matthews, N. C.

J. L. GRIFFIN is erecting planing and moulding mill at Quitman, Ga.

CANNING & GILL, Selma, Ala., expect to establish wagon factory. Will probably organize as a company; capital, \$40,000.

THE foundry previously reported as rumored for Selma, Ala., will be started by Dr. J. H. Robbins. Will manufacture all kinds of agricultural implements, in addition to other work. Contract given for the building; capital, \$10,000.

GEO. PEACOCK, Selma, Ala., is adding machine shop to his foundry.

FIRST Presbyterian Church, Richmond, Va., will erect new church building. Proposals invited to April 15 by W. E. Cuthshaw.

WASON CAR WORKS, Chattanooga, Tenn., are increasing supply of machinery.

THE bagging factory previously mentioned as probable in Selma, Ala., is being worked up by S. B. Shivers and others.

A STREET railroad company has been chartered in Montgomery, Ala.

THE Birmingham, Ala., Ice Factory will double its capacity.

THE new foundry and machine shops of Evan Jones, at Calera, Ala., previously mentioned, will be ready for work in a few weeks.

N. W. HOWSON, superintendent of the Mount Savage Locomotive Works, will build extensive locomotive works in Anniston, Ala.

PARSONS & Co., Anniston, Ala., have begun erecting planing mill and sash factory at Talladega, Ala.

THE Bowie Marble Quarry, near Talladega, is to be developed.

A SILK factory is to be started in Del Rio, Texas.

THE Lone Star Brewing Association, San Antonio, Texas, is pushing work on the new brewery.

MOORE & BRADY, Newbern, N. C., are enlarging their canning factory.

P. C. WILSON, Chattanooga, will erect a \$50,000 house.

WORK on buildings for the Chattanooga Iron Fence and Screw Co., previously noted, will be commenced at once.—Mr. W. L. Slocum, vice president, having charge of the matter.

COL. MATSON, superintendent of East Tennessee & Western North Carolina Railroad, has bought Crumley & Miller's foundry at Johnson City, Tenn., and will convert it into stove foundry and hollow-ware factory.

THE Roberdel Cotton Mill at Rockingham, N. C., is receiving its machinery. It will start with 3,000 spindles and 150 looms. The full capacity of the building is 6,000 spindles and 250 looms.

MCDUFFEE & Co., of Anniston, Ala., will start brick yard, using best machinery.

THE Cincinnati, Green River & Nashville Railroad will probably be built from Nashville to connect with roads running to Louisville and to the East.

A COSTLY Catholic cathedral will be erected in Nashville, Tenn.

THE City Mills Company, of Knoxville, Tenn., will soon commence work on their \$30,000 flour mill.

BEARDEN & McCULLOUGH are putting up new saw mill near Tullahoma, Tenn.

A. D. and O. H. SNYDER, of Bryan, Ohio, expect to start boot and shoe factory at Tullahoma, Tenn.

THE rebuilding of George Stacy's chuck factory at Manchester, Va., lately burned, has commenced.

GRANVILLE VALENTINE, Richmond, Va., is building a barrel factory at Manchester, Va.

THE new Butter Dish Factory Company, Chattanooga, are pushing work on their building.

Z. E. RANNEY, W. L. Boyd and others, of McKinney, Texas, are stockholders in the cotton-seed oil mill to be erected at that place, previously reported.

INCORPORATED—Rosendale Street Railway Co. of Fort Worth, Texas; capital \$50,000.

A NASHVILLE company is building large handle and spoke factory near Cave Spring, Tenn.

BLACKBURN & OZIAS have commenced building a new sash and blind factory at Cleveland, Tenn.

PARHAM'S Mattress Factory, Chattanooga, Tenn., will soon occupy new building, enlarge operations, &c.

D. R. DAVIS, lately of Morristown, Ohio, will engage largely in brick making at Chattanooga, Tenn.

THE new foundry and machine shops for the Wilder Machine Works, previously reported, are being pushed forward.

ST. ANTHONY'S German Catholic Church, Louisville, Ky., will erect a new \$51,000 church building.

B. F. AVERY & SONS, Louisville, Ky., will put up an additional plow factory to cost \$15,000.

THE Lock and Hardware Manufacturing Co. has been organized at Lexington, Ky.

THE East Tennessee, Virginia & Georgia Railroad will commence work at once on a large passenger depot at Atlanta, Ga.

INCORPORATED—Little Rock Street Railway Co.; capital \$100,000.

MESSERS. McKay and Figners, Columbia, Tenn., are working up a pressed brick factory.

CHARTERED—Southern Machine Co., of Bedford county, Tenn.

THE Mobile Cotton Exchange are preparing to erect a new building.

THE saw mill which Mr. — Burton is building at Baton Rouge will have capacity of 40,000 feet per day.

P. L. TERRY & Co., Roanoke, Va., have awarded contract for a \$12,000 warehouse.

KNOXVILLE Ice Factory, Knoxville, Tenn., will spend \$20,000 for new building and machinery.

C. M. MCGHEE, E. J. Sanford, and others, of Knoxville, Tenn., are interested in the proposed \$100,000 woolen mill previously reported.

AMONG the leading buildings to be erected in Knoxville, Tenn., this year are a \$100,000 car and machine shops, by the East Tennessee, Virginia & Georgia Railroad; a \$20,000 passenger depot by same; State Insane Asylum, \$80,000; court-house, \$75,000; Catholic church, \$40,000; Baptist church, \$40,000; library building, by C. M. McGhee, \$30,000; warehouse by Chamberlain & Albers, \$30,000; warehouse by F. McNulty, \$30,000; warehouse by Cullen & Newman, \$26,000; warehouse by McCallum Bros., \$20,000; besides several mills previously mentioned.

A GRAIN elevator will be built in Knoxville, Tenn.

PRESIDENT RAOUL, of the Central Railroad, says his company will build a compress at Eufaula, Ala.

THE new Cotton-Seed Oil Mill Company of Fort Worth, Texas, lately reported, have added \$25,000 to capital stock.

MORRILL Memorial Hall, to cost \$10,000, will be erected in Kyle, Texas.

DARLINGTON & MEYERS, of Palestine, Texas, will build the \$16,000 court-house at Groveton, Texas.

L. E. GORE, Hot Springs, Ark., will buy machinery to work a gold mine.

AN axe-handle factory is being erected in Dickson Co., Tenn., by Western men.

G. W. PARKER, Newberne, Tenn., is putting new machinery into his flour mill.

LOCKWOOD, GREENE & CO.
MILL ENGINEERS
Office, 65 Westminster St., Providence, R. I.

Carefully prepared plans, specifications and estimates furnished for the construction, equipment and organization of new mills and the revision and improvement of old.

THE Baptist State University, capital \$300,000, has been incorporated in Texas, and will erect buildings in Georgetown, Texas.

INCORPORATED in New Orleans—The Louisiana Electric Light and Power Co.; capital \$300,000. The directors are: Burris D. Wood, M. J. Hart, Moses Schwartz, Charles S. Rice, George A. Chinpella, John Fitzpatrick, A. Jarlet, Simon E. Marx and James D. Edwards.

THE Marshall Foundry Company has been organized in Hickory, N. C., for making castings, manufacturing machinery, &c.

THE Carolina Central Railroad has commenced work on a new round-house at Lincolnton, N. C.

ARLINGTON Guarantee Gold Mine, located four miles from Charlotte, N. C., has issued \$20,000 in bonds, to buy machinery, &c.

J. T. JONES, of Palestine, Texas, has received contract for water-works at Victoria, Texas.

THE Southern Pacific Railroad Co. has been organized, with a capital of \$1,000,000, by H. B. Plant, Henry B. Sanford and others.

BINGHAM, HOPKINS & Co., of Baltimore, have paid \$35,000 for site for new straw goods factory, which they will shortly erect.

N. H. BURNS and Max Black, of Albany, Tex., will build water-works in that town.

CONTRACT has been signed for building gas works in Corsicana, Tex.

NEW water-works will be established in Waco, Tex. The Mayor is now investigating cost, best system, &c.

INCORPORATED in West Virginia—the South Atlantic Power Co. of Jacksonville, Fla., for manufacturing and dealing in machinery, &c.

W. S. PRIMROSE, Raleigh, N. C., invites bids to April for the exposition building, to be about 300 by 300 feet.

THE American Contracting Co., of New York, has received contract for grading, bridges, stations, work-shops, &c., for the New York, Norfolk & Charleston Railroad, for \$3,101,171. Road is to run from Norfolk to Charleston—330 miles.

INCORPORATED in Baltimore, by Wyatt Owen, R. W. Applegarth, and others.—The Avon Slate Co.; capital, \$50,000.

COLONEL — BRECKENRIDGE, Eagle Pass, Tex., will buy about \$10,000 worth of machinery for coal mine.

MACHINE shops of Western North Carolina Railroad, Salisbury, N. C., are to be enlarged.

DISPATCH from Calera, Ala., just as we go to press, says: "Transactions were consummated today involving an investment of \$1,500,000 here by a Michigan company. A large iron furnace and agricultural implement manufactory will be established." Particulars later.

BURNED.

Gin and mill of J. C. Holly, Red Oak, Barnwell county, S. C.

WORKS of Tennessee Handle Factory, at Chattanooga, Tenn.

"DUMPLIN MILLS," at Mount's Cross Roads, Jefferson county, Tenn.; owned by Kendrick Carmichael.

FLOUR mill of George Vernon, at Comanche, Texas.

FLOUR mill of Allen & Mullins, at Thrifty, near Brownwood, Texas; loss, \$20,000.

WORKS and machinery of the Flamingo Guano Co., at Baltimore; loss about \$30,000.

P. S. CHAPPELL & SON, fertilizer and chemical works and machinery, at Baltimore; loss about \$180,000.

A LARGE fire in Jackson, Tenn., destroyed about \$80,000 to \$100,000 worth of property.

Saw mill of J. F. Simpson, near Ocala, Fla.

Saw mill of H. A. Farmer, Starke, Fla.

PHILIPS BROS.' flour mill, Charlotte, N. C.; loss \$6,000.

The Pride of the South.

The Big Cotton Mill at Columbus, Ga.

SOUTHERN OFFICE

BALTIMORE MANUFACTURERS' RECORD, ATLANTA, GA., March 21, 1884.

I wish to tell your readers more about the Eagle & Phoenix Mills, of Columbus. It is the very leader of our Southern manufacturing institutions.

Mr. Wm. H. Young has issued a circular to the stockholders, submitting the proposition to build a fourth mill at a cost of \$700,000 of dollars, out of the surplus money of the establishment. Without any additional cost of water-power or mill administration, the benefit of an additional mill will be enjoyed without any further assessment of stock, and with only the running expense of material and the common labor to manufacture.

As I have told you, the main spirit of this great establishment has been Col. W. H. Young, who has been living in Columbus and that section since 1826, and who is to-day one of the smartest cotton-mill men in the South. He built the first mill of this establishment 35 years ago, and then constructed a second mill. These mills paid the stockholders 25%, run 11,000 spindles and 250 looms. The whole concern was burned down during the war.

In 1868 No. 1 was rebuilt, and began running in 1869. The capital stock was \$463,900. In 1870 No. 2 was built, the capital stock being put at \$1,350,000. In 1870, '71 and '72 cotton cost from 15 to 26 cents per pound. Goods paid well, the profit averaging on the goods 26 97-100%, and on the capital 14 67-100%. The panic ran from 1873 to 1876, depressing matters. No. 3 was proposed to be built. The additions were all made on the principle that production must be enlarged and property utilized to earn more money. The third mill brought the cost value of production up to the capital.

The two mills ran from 1873 to 1879—six years. The profit on production fell from 26 97% to 16.53%, and on capital from 14 67% to 10.42%. The third mill began to run in 1879 and was built from the earnings.

The three mills, from 1879 to 1884, gave a net profit on production of 14.96%, but on capital of 15.27%. The net annual earnings for 5 years were \$250,774. The third mill gave an actual yearly gain of \$60,644, or \$303,220 in the five years.

The general result was 1.57% less profit on production, but 4.85% more profit on capital, with the additional mill.

The three mills gave altogether in five years as net earnings \$1,253,869.

With the three mills 46,000 spindles are run. It is proposed to add a \$700,000 mill, with 25,000 more spindles, which Mr. Young says would add over 50% to the value now produced. This will increase the profit on the capital stock to 22% relatively.

It is proposed to put No. 4 mill on the Alabama side of the river, on a site owned by the company, and to utilize a stone dam built and paid for.

No. 1 mill has 13,000 spindles and 16 feet fall of water.

No. 2 mill has 12,000 spindles and 15 feet fall of water.

No. 3 mill has 21,000 spindles and 20 feet fall of water.

No. 4 mill will have 25,000 spindles and 22 feet 9 inches fall of water.

The new mill will consume 15,000 pounds daily, making goods of \$800,000 value.

The total estimated cost of mill No. 4 is \$293,449, and of machinery \$396,450, making whole expense \$689,899.

For the years from 1870 to 1884—14 years—the net profits have been from the 3 mills.....\$2,583,883
The dividends.....1,350,690
Surplus profit.....846,873
Interest paid out.....286,390
Improvements and machinery.....196,825
Reserve fund.....650,000

These mills make 100 kinds of cotton and woolen goods. The capital is all Southern, and the sale mostly in the South.

The mills have 2 blocks of houses in the city and 84 houses for operatives across the river.

The mill has an immense savings bank. It was started this way: a woman's dress caught in the machinery. The superintendent cut her dress apart to get her loose and cut a \$50 bill in two hidden in its folds. She had saved this. Mr. Young then started the bank to take care of the money of the mill hands. One operative has \$9,000 in the bank; one colored employee has \$1,000 deposited. Depositors are paid 6 per cent. per annum interest. The management sometimes gives Christmas dinners to the operatives, ordering once over 700 turkeys.

This is a magnificent establishment, a model of its kind, and demonstrates what can be done with cotton and woolen manufacturing in the South. I. W. AVERY.

Railroad Building in the South in 1883.

Some Interesting Figures.

SOUTHERN DEPARTMENT

BALTIMORE MANUFACTURERS' RECORD, ATLANTA, GA., March 22, 1884.

The progress of railroad building in the South in 1883, as compared with other sections, presents some interesting figures.

RAILROAD FIGURES FOR 1883.

States.	Miles, 1882.	Miles, 1883.	Inc., miles.	Inc., per ct.
New England.....	6,155	6,245	90	.014
Middle.....	17,322	18,775	853	4 1/2
Southern.....	17,093	19,325	2,232	9
Western.....	65,982	70,122	4,140	6
Pacific.....	5,597	6,267	670	12

These figures show that in the year 1883 the Southern States made a larger per cent. of increase in railroad construction than any other section except the Pacific States, even exceeding the imperial and mighty West. The significance of these figures cannot be overlooked. They testify to the greater proportionate progress in this crucial test of development by railways in the South.

Looking into the details of this Southern growth in 1883, we find as follows:

Total track, 1882.	Inc., 1883.	Total track, 1883.	Inc., per ct.
Alabama.....1,962.19	136.5	2,098.69	7
Florida.....1,064.69	194	1,258.69	19
Georgia.....2,969.59	78	3,047.59	2½
Kentucky.....2,899.57	117.1	3,016.67	4
Louisiana.....1,386.38	256.9	1,643.28	19
Mississippi.....512.35	330.3	842.65	61
N. Carolina.....1,280.43	46.35	1,326.78	3½
S. Carolina.....1,635.38	42.5	1,677.88	2½
Tennessee.....3,389.73	50.5	3,440.23	2
Texas.....6,158.82	77	6,235.82	1½
Virginia.....3,045.15	96	3,141.15	3
W. Virginia.....309.79	112.5	422.29	36

From these figures it will be seen that Mississippi has led the South in her railway expansion in 1883, showing 61% increase; West Virginia came next, showing 36% growth; Florida and Louisiana next, 19%; Alabama next, 7%.

It will not be uninteresting to notice the capital invested in 1882 in the South.

Alabama.....	\$68,963,393
Florida.....	27,191,194
Georgia.....	72,825,130
Kentucky.....	159,744,624
Louisiana.....	70,550,578
Mississippi.....	17,670,929
North Carolina.....	44,871,170
South Carolina.....	41,998,949
Tennessee.....	126,323,124
Texas.....	225,701,446
Virginia.....	174,975,172
West Virginia.....	18,182,116

\$1,037,967,525

We had an aggregate in 1882 of \$1,037,000,000 of capital invested in railways in the South. Texas led; Virginia, second; Kentucky, third; Tennessee, fourth; Georgia, fifth; Louisiana, sixth; Alabama, seventh; North Carolina, eighth; South Carolina, ninth.

I. W. AVERY.

THE Nashville Cotton Mills, of Nashville, Tenn., have met with such decided success under the able management of T. B. Dallas, the treasurer, since first organized in 1881, that they have decided to more than double their capacity. This company was organized in 1881, with a capital of \$100,000,—the designs for the original mill, as well as for the proposed extension, having been prepared by the Lowell Machine Shop, Lowell, Mass., of which Mr. E. H. Owen, Jr., is the able engineer. The contract for the additional machinery has been placed with this company.

MANUFACTURING.

Subscribe to the Baltimore Manufacturers' Record. Price \$3 per year.

BALTIMORE.

MESSRS. JOHN G. HETZEL & SON, metallic roofing and spouting manufacturers, control the Hays Patent Ventilating Skylight, which is guaranteed to remain snow and water proof. This skylight has been put in many of the most prominent buildings in Baltimore, such as the Johns Hopkins University, Mr. John W. Garrett's residence, &c. Messrs. Hetzell & Son have some large jobs on hand for their cornice work, and report business as active. Their increasing trade demands more ample accommodations, and they will shortly commence work on a five-story pressed brick warehouse, to be occupied as soon as finished.

WM. R. EMERSON, agent of the E. M. Birdsall Co., and also general machinery agent, reports business brisk, with a large number of orders being received for shipment in April. Among other sales during the past week were one of a Birdsall Saw Mill and a 25-horse power Porter Engine. His illustrated catalogue will be sent free upon application.

MESSRS. JANNEY & CONGDON, 8 N. Charles street, successors to the Goodyear Rubber Co., carry a full stock of rubber goods of all kinds, including rubber clothing, sheeting, boots and shoes, fire buckets, matting, combs and brushes, bath tubs, packing and hose, belting, lace leather, picker leather, &c. Their supply of hose for hydrant, engine, suction, street washing, &c., is very liberal. Catalogues and price-lists will be furnished upon application.

MESSRS. W. J. CLARK & BRO., hydrant manufacturers and pattern and model makers, find the demand for their hydrants increasing so rapidly that they expect to enlarge their facilities by taking additional room for this business.

BATEMAN, RICHARDSON & Co. have lately taken a large building on St. Paul street, and fitted it up with ample machinery for manufacturing straw goods.

IN GENERAL.

THE Halifax Sugar Refinery, Halifax, N. S., have been setting a tubular boiler with Jarvis Patent Furnace, and they will use for fuel culm or slack coal.

WELCH & LAWSON, 203 and 305 Chestnut street, New York, lately shipped one of their "Lawson Gas Engines" to the Great Atlantic and Pacific Tea Co. of Richmond. This makes the fourteenth engine purchased by Messrs. Welch & Lawson for the various stores owned by this tea company, and we understand the one hundred and thirty-one stores now under the supervision of that company are each to be supplied with Lawson's Gas Engine.

THE Jarvis Engineering Co., of Boston, have issued a circular, in which they say: "We beg to inform you that we shall remove on March 18th to our new store, No. 61 Oliver street, where we shall be pleased to see our friends and customers. We propose to represent only the best specialties in the line of steam supplies, and shall be prepared to furnish and put up at short notice, complete steam plants, having the agency of the Jarvis Patent Furnace, Armstrong & Sims Engine, Schutte & Goehring's Jet Apparatus (consisting of the Korting Injectors, induction condensers, air compressors and exhausters, siphon pumps, etc.) Sheffield grate bars, National Feed Water Heaters, steam pumps, etc., we shall be enabled to erect complete outfits of motive power at a low price. Our mason work will be under charge of Mr. H. W. Leach, and our engine business will be managed by Mr. L. B. Wright. We do not propose to confine ourselves to local business, but shall be prepared to erect steam plants at any point of the United States, Mexico, West Indies, or Sandwich Islands."

THE Fishing Creek Cotton Factory Co., S. C., have just added 2,000 spindles to their mill.

Ice-Making Machines and Refrigerating Machinery for Oil Refineries, Breweries, Cold Storage Warehouses, &c., &c.

We call attention to the card of the Pictet Artificial Ice Co., limited, on page 189. These machines, of which there are already over 250 in use, are rapidly gaining favor among all who require refrigeration in their business.

The essential difference between the Pictet machines and all others is in the gas used for the absorption of heat. All other machines, of which there are at present some 28 different types, use ammonia as a refrigerating agent.

The objections to the use of ammonia are mainly the enormous pressure necessary to condense the gas, which ranges from 200 to 300 pounds per square inch; the necessity to lubricate the pump, which fouls the interior of the machine to such an extent in a short time as to require frequent stoppage to clean out; this operation involves the dismantling of the machine, and sometimes becomes necessary in the hottest season of the year; the great power necessary to compress the gas, consequent upon its resistance to liquefaction; great difficulty in keeping joints tight and preventing leakage of the gas, which, being expensive, makes a heavy item of the running expenses; the constant care and attention

breweries, pork-packing houses, cold storage warehouses, and in other industries requiring a cool, dry atmosphere.

When applied to refrigeration the cold liquid is pumped through coils built in the rooms to be cooled, and the liquid, in passing through the coils, absorbs the heat from the rooms and is returned to the machine to be recharged, and is thus continuous in its motion.

Further information, if desired, together with plan, specifications or pamphlets, can be furnished to applicants at the office of the company, 142 Greenwich street, New York, where there is also in operation at the desire of the visitor a machine which demonstrates practically its well-established claims to superiority over all other refrigerating machines.

Albany Steam Trap Co.

The Albany Steam Trap Co., Albany, New York, are moving into new and commodious quarters, and hereafter their office and works will be at 78 and 80 Church street, where they are fitting up on an extensive scale for the manufacture of their well-known specialties, gravitating and special bucket return steam traps, and also, as a new departure, the manufacture of the Blessing patent renewable seat-globe stop and check valves. A special feature of the valves made by this company is that affording renewable seats, which do

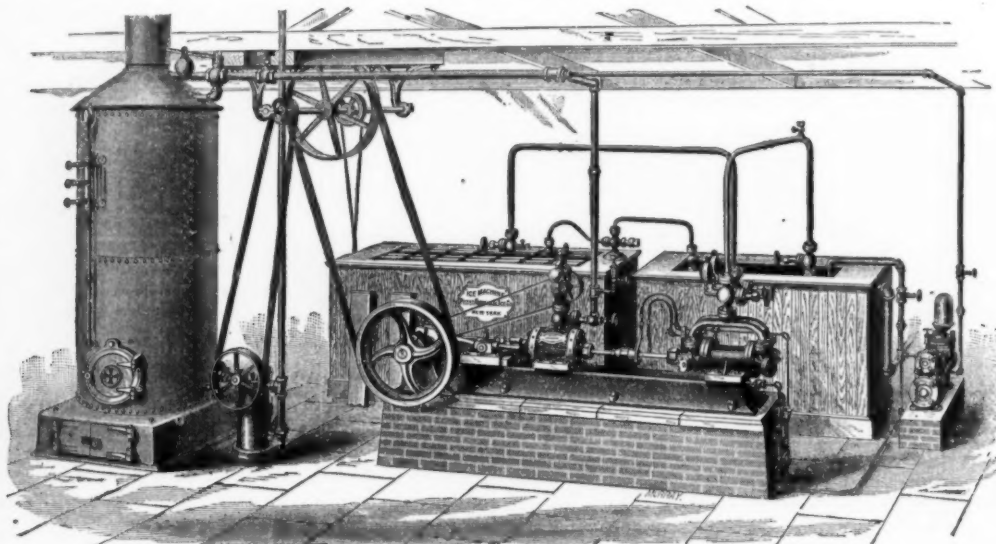
done, as there is a permanent seat always in the valve shell the same as in the old style valve.

Radiator, angle, check and stop valves will be put on the market soon. They are also busy with the patterns for straight way, stop and check valves, and will soon introduce a combined stop and check valve, in one shell, thereby saving the cost of one valve and one set of connections. This combination can be used to advantage in any position where a stop is required in connection with a check valve. The patterns are nearly completed for a special open way radiator valve, which has an opening as free as that of a plug cock. The patterns for other valves will soon be started, including safety valves. All of these will have the advantage of the renewable seats.

The new factory of this company is such as to afford most excellent facilities, being a fine three-story brick building, with a frontage of 58 feet and depth of 68.

The Manufacturers' Record,

published in the city of Baltimore, is one of the most valuable journals seeking patronage from this section. "Devoted to the upbuilding of Southern manufactures and the development of the material resources of the South," it, in good taste, holds itself aloof from all political questions, save those touching directly the industrial interests of the people. The



THE PICTET ICE-MAKING MACHINE.

necessary in watching the machine to prevent accidents.

The Pictet machine uses a gas, (arhydrous sulphurous oxide,) a discovery of Raoul Pictet, of Geneva, Switzerland, which is revolutionary in its character and has many advantages in the application to refrigeration, the pressure of this gas being only one-sixth that necessary in ammonia machines. Its heat-absorbing power is very great; it is a self-lubricant, requiring no lubrication of the pump; it can be used in conjunction with any metal, without having the slightest effect thereupon. The machine, in its construction, is of the simplest, and, being built, with the exception of engine and pump, entirely of copper, practically indestructible.

The cut of large machine shown on page 189 represents one of their largest machines for the production of ice, and has been in successful operation in Louisville, Ky., making 30 tons of ice in 24 hours, the ice being crystal clear and in blocks weighing about 400 pounds each. The company also has machines in operation at Brenham, Tex.; New Orleans, La.; Lake Maitland, Fla.; Maysville, Ky.; and are now erecting one at Greenville, S. C., in addition to many others throughout the South.

A large number of their machines have also been adopted for refrigeration of

not have to be screwed in or out, but are simply dropped into their places, and are held in position by the bottom of the cage, which is cast on the cap. The renewable seats and discs are cast from the best phosphor-bronze metal, which has lasting qualities double that of the best steam metal commonly used in first-class valves.

It is a fact well known to engineers and steam users generally that any improvement in steam valves, whereby they could be renewed or made tight without removing the body of the valve from the pipe, and at the same time be simple, durable and cheap, would be supplying a long-felt want, and this is now accomplished by the Albany Steam Trap Co. The renewals for each size valve consisting of the seat and disc, are all made to a standard gauge, and are guaranteed to fit. They will be kept in stock, and furnished at small cost. If at any time it is not convenient to order the renewal seats, they are simply plain rings and can be turned in an engine lathe, by any ordinary machinist, out of any metal he may have of a suitable size. This advantage will be appreciated, as it often happens that a metal, other than bronze or steam metal, is required to convey liquors, alkalies and chemicals, which destroy steam metal more rapidly than iron. There need not be any stoppage while this is being

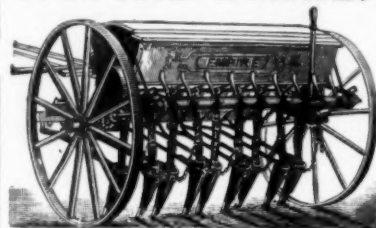
RECORD is very positive in its advocacy of a protective tariff, and this is no slight evidence of its identification with the great industries of the South.—*Alabama Industrial, Talladega.*

[Evidently that editor knows what he is writing about.]

THE MANUFACTURERS' RECORD, of Baltimore, in noting the progress of Southern towns, fails to review the increasing prosperity of Talladega. This was quite an oversight, but we presume the RECORD could not know all things.—*Alabama Industrial, Talladega.*

[While we cannot claim to know all things, we do know of Talladega's progress; but should we attempt to review the development of all the growing towns of the South, the task would be too great for any one issue or for any dozen. In fact the number of live Southern towns seems to be much greater than the number of dead ones, and we are often puzzled to know where the greatest advance is being made. We are always glad for our friends in the South to let us know of the progress of their sections, and our columns are open to the editor of the Industrial to tell of what Talladega is doing.]

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Exhaust Fans.

The accompanying illustrations show several styles of the exhaust and ventilator fans manufactured by the Huyett & Smith Manufacturing Co., of Detroit, Mich. It is claimed that these fans are the only kind manufactured that cannot be clogged and will successfully exhaust wet stringy elm and other shavings from hoop and head lining machinery, excelsior, cotton, and material of like nature.

They are specially adapted for removing dust from emery and other polishing wheels, smoke and gas from machine shops, steam from dyeing establishments, ventilating buildings, tunnels and mines, removing bark and dust from mills in tanneries,



FIG. 1.

shavings and dust from planing mill machinery, and other wood-working establishments, elevating cotton seed and other light grains, etc.

Figure 1 shows an exhaust fan adapted for planing mills, furniture factories, &c. Figure 2 is a ventilator fan, which the manufacturers claim has many advantages over other ventilator exhausters for removing foul air, gas, steam, &c., from rooms or buildings, or for creating a current of air where needed; while figure 3 illustrates a single exhaust fan, which is made either right or left hand.

Messrs. Jackson & Tyler, Baltimore, are agents for these fans, and further information can be obtained from them.



FIG. 2.

List of Patents.

The following patents were granted to citizens of the Southern States, bearing date Mar. 18, 1884. Reported expressly for this paper by Louis Bagger & Co., mechanical experts and solicitors of patents, Washington, D. C.

- 295,302. Rose, Rufus E., Kissimmee. Dredge.
 295,322. Albrecht, J. C., Columbus, Ga. Spark-arrester.
 295,330. Barnum, J. W., New Orleans, La. Cistern.
 295,144. Beatty, W. D., Mannington, W. Va. Car-signal.
 295,476. Beatty, J. O., and I. L. Morris, Baltimore, Md. Combined fruit parer and seeder.
 295,310. Bommarina, Frederick, New Orleans, La. Bale-tie splice.
 295,319. Chandler, S. P. and J. M., Lynch's Lake, S. C. Car coupling.



FIG. 3.

- 295,331. Cooke, J. W., Franklin, Tenn. Steam traction tug-boat.
 295,487. Custer, Geo., Whitney, Tex. File.
 295,365. Davis, A. G., Baltimore, Md. Telephone-box.
 295,156. Dauber, John C., Newport, Ky. Making watch-case centres.
 295,377. Forbes, L. D., Stranger, Tex. Governor for cotton-gin feeders.
 295,242. Genese, David, Baltimore, Md. Flexible air-tight eye guard.
 295,387. Harkey, G. W., Matthews, N. C. Fertilizing machine.
 295,170. Hendrick, Obadiah, Macon, Miss. Tenon extractor.
 295,149. Comeaux, Jules, Plaquemine, La. Plow attachment.
 295,397. Holman, Wm. P., Howard, Ga. Blacksmith's punch.
 295,401. Jackson, Adolphus, Frederick, Md. Washing machine.
 295,496. Jones, Benj. F., Beauregard, Miss. Hame-fastener.
 295,395. McCabe, J. H., Jacksonville, Fla. Cartridge implement.
 295,502. Morgan, J. T., Selma, Ala., and H. F. Hayden, Washington, D. C. Gas furnace.

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- 295,457. Steinbach, G. P., Baltimore, Md. Shoo-fly rocker.
 295,303. Story, J. M., Spring City, Tenn. Saw-mill.
 295,462. Thurmond, W. H., Forsyth, Ga. Boiler-washing machine.
 295,462. Tillery, John A., Baltimore, Md. Cansoldering machine.
 295,210. Todd, G. N., Fort Smith, Ark. Cotton harvester.
 295,467. Webb, G. B., Bell's Ferry, N. C. Ice-shaver.
 295,318. Zanetti, F. C., Bryan, Texas. Aquarium.

NEW PUBLICATIONS.

THE CREATORS OF THE AGE OF STEEL, by W. T. Jeans. New York: Charles Scribner's Sons.

In this volume are given the biographies of Bessemer, Siemens, Whitworth, Brown, Thomas and Snellins. The work is a valuable one and should be read by everybody interested in the iron industrial trade. It will be found also of much interest to the general reader.

POLK COUNTY, Florida, its Lands and Products, by G. W. Hendry, of Fort Meade, Fla., is a pamphlet of 50 pages, designed to set forth the advantages and attractions of one of the most inviting counties in Florida. It can be had from Mr. Hendry; price, 25 cts.

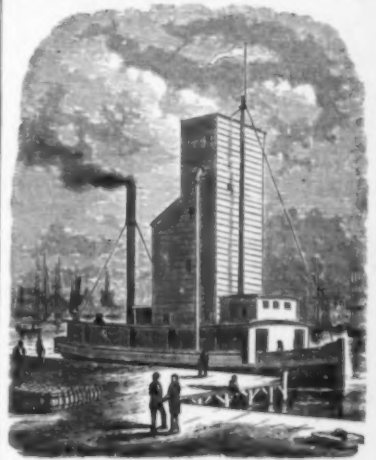
THE Century for April is particularly interesting and instructive. Among the leading articles are The White House, by E. V. Smalley, a profusely-illustrated description of the home of our presidents; Sidney Lanier, by Wm. Hayes Ward; How Wilkes Booth Crossed the Potomac, by George Alfred Townsend, the well-known "Goth" of newspaper fame; and Notes on the Exile of Dante, by Sarah Freeman Clarke. Fred. Mather contributes a finely illustrated article on "Progress in Fish Culture;" while S. G. W. Benjamin gives an interesting account of "Among the Magdalen Islands." Numerous other interesting articles also help to maintain the great attractions of this most popular monthly.

A FEATURE of special interest in The Current of March 22 was an extended editorial review of the manuscript of a volume soon to be published, the object of which is to absolutely demonstrate the discovery of America in the fifth century by the Chinese. The information of the preparation of such a work is thus given the public for the first time. The volume will prove one of the most splendid achievements of American scholarship, and will arouse the attention of all literary and scientific people. Its author, a gentleman of the most profound philologic, historic and literary acquirements, appears before the public in this work for the first time, though he is widely known in another capacity.

THE Alabama Industrial, Vol. 1, No. 1, has just reached us. It is a four-page paper, devoted to the industrial interests of Alabama and the South, and, if we may judge from its first issue, it will be found doing good service in this grand cause. It is published at Talladega, Ala.

THE sixth illustrated catalogue issued by E. W. Bliss, manufacturer of presses, dies and special machinery, Brooklyn, N. Y., is one of the best publications of this kind that we have lately received. It is a handsomely printed book of nearly 250 pages, giving illustrations and full particulars as to weight, size, capacity, price, &c., of a long line of tools and special machinery. Mr. Bliss is prepared with improved modern appliances for accurate machine work, and is always ready to consider proposals for manufacturing any special machinery.

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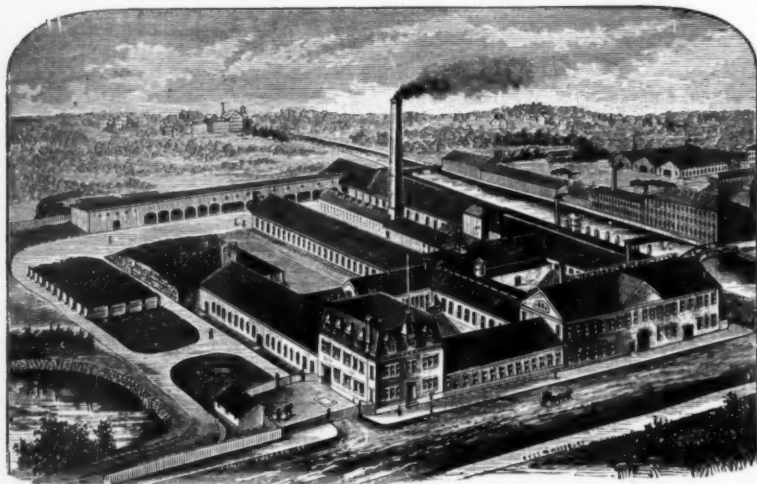
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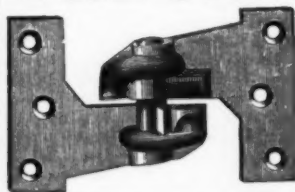
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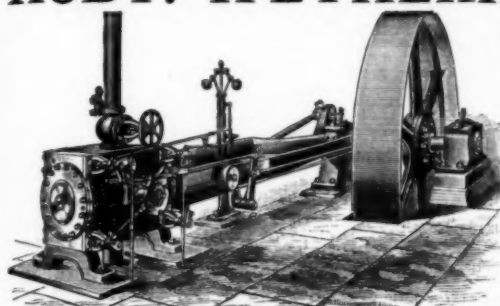
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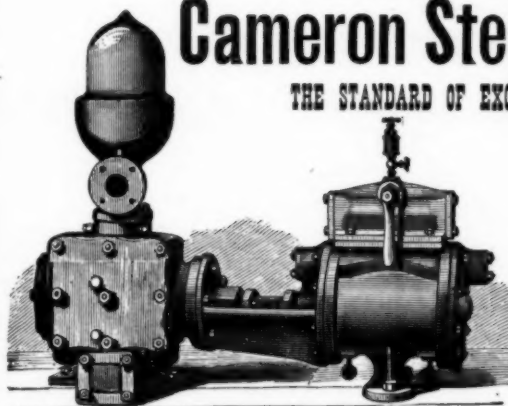
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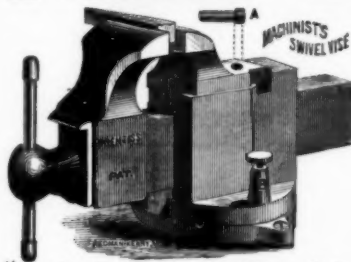
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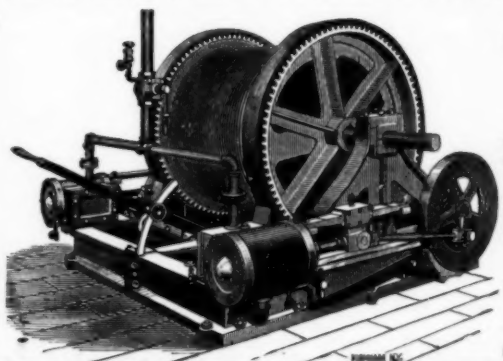
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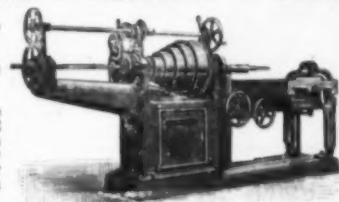
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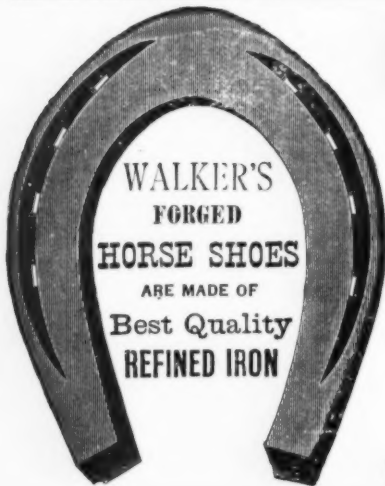
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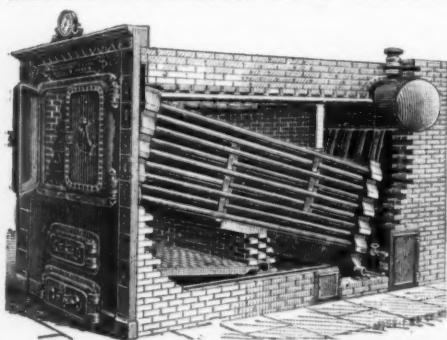


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White Mountain Ice-Cream Freezer.

The only Freezer ever made having three distinct motions, thereby producing finer, smoother Cream than any other Freezer on the market. Acknowledged by every one to be the best in the world. Over 300,000 in use to-day. Outside Irons galvanized, but all inside the can coated with Pure Block Tin. Tube water-proof, machinery easily adjusted and operated. We also carry large stock of Packing Tube, Packing Cans, Ice Crushers, &c. Send for Price List and Trade Discounts.

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MOLASSES GATES.	
Stebbins Patterns.....	dis 70 & 10
Stebbins Genuine.....	dis 67 & 10
Stebbins Tinned Ends.....	dis 40 & 10
Chase's Hard Metal.....	dis 50 & 10
Self-Measuring (Enterprise).....	dis 30
Lincoln's Pattern.....	dis 60 & 10
Wood's.....	dis 15
Boss Nos. 1 2 3 4	
'Boss, Japanned Finish.....	dis 60 & 10
'Boss, Bronze Finish.....	dis 50 & 10
NUTS AND WASHERS.	
'Square Nuts.....	8 c off list
'Hexagon Nuts.....	8 c off list
'Washers.....	7 c off list
OILERS.	
Zinc and Tin.....	dis 60 & 10
Brass and Copper.....	dis 30
Malleable (Hammer's).....	dis 30
PINKING MACHINES.....	dis 75c, net
PLATING MACHINES.	
Astor Plating Machine.....	each \$15, dis 25
Crown Plating Machine.....	dis 25
6 in., 8 in., 10 in., 12 in. each.	
PLANES AND PLANE IRONS.	
Bench, First Quality.....	dis 30
Bench, Second Quality.....	dis 25
Molding.....	dis 15
Bailey's (Stanley R. & L. Co.) new list, Jan. 1892.....	dis 30 & 10
The Stanley (R. & L. Co.) new list.....	dis 30 & 10
January 1879.....	dis 20 & 10
Bailey's.....	dis 20 & 10
Plane Irons, Butcher's.....	\$5.50 to 10
Plane Irons, Auburn Tool Co.....	dis 30
Plane Iron, Ohio Tool Co.....	dis 30
Plane Irons, Sandusky Tool Co.....	dis 30
PLANES AND NIPPERS.	
Button's Patent.....	dis 30
Hall's Pat. Compound Lever Cutting Nippers.....	dis 25
No. 2, 5 in. \$13.50; No. 4, 7 in. \$21	dis 25
'Gas Pliers.....	dis 50
PLUMBS AND LEVELS.	
Disston's.....	dis 40
Stanley R. & L. Co.'s Pat. Adjustable.....	dis 65 & 10
Stanley R. & L. Co.'s Non-Adjustable.....	dis 15 & 10
Chapin's Patent Adjustable.....	dis 15 & 10
Chapin's Non-Adjustable.....	dis 15 & 10
Standard Rule Co.'s New Adjustable.....	dis 15 & 10
Standard Rule Co.'s Non-Adjustable.....	dis 15 & 10
'Pocket Levels.....	dis 15 & 10
RAIL.	
Sliding Door, Wrought Iron.....	dis 30
Sliding Door, Bronze Wrt. Iron.....	dis 35
Sliding Door, Iron, Painted.....	dis 10 & 10
Barn Door.....	dis 10
Per 100 feet.....	\$2.50 3.50 5.00 dis 10
B. D. for N. E. Hangers.....	Small Med. Large.
Per 100 feet.....	\$2.10 2.70 .30 net
RAZORS.	
J. R. Torrey Razor Co.....	dis 30
RAZOR STROPS.	
Genuine Emerson.....	dis 60 & 65
Badger's Emerson.....	dis 60 & 65
Badger's (not Emerson).....	dis 35
Imitation Emerson.....	dis 30
Torrey's.....	dis 30
RYVETS.	
Iron and Tinned, new list, Dec. 10, 1891.....	dis 45
In bulk, new list, Dec. 10, 1891.....	dis 45
Copper Ryvets and Burrs.....	dis 45
Nos. 7 8 9 10 11 12 13 14 15	
'In 40c. 50c. 52c. 54c. 56c. 58c. 60c. 62c. 70c.	
RYVET SETS.	
Stair, Brass.....	dis 25
Stair, Black Walnut.....	dis 25
SAWS.	
Chapin's.....	dis 70 & 10
Standard.....	dis 40 & 10
Stanley.....	dis 40 & 10
Stevens & Co.....	dis 70 & 10
Stevens & Co. Miscellaneous.....	dis 50 & 10
SAND IRONS.	
Self-Heating, Charcoal.....	dis 9.00 net
Mrs. Pott's Irons.....	dis 35
Enterprise Star Irons, new list, July 30, 1892.....	dis 35
Comb'd Plater and Sand Iron.....	dis 15
Common Sand Irons.....	dis 25
SAND PAPER.	
Baeder & Adamson's Flint, 0001 1/2 \$4.00 'r.m. (2)	
Baeder & Adamson's Flint, 2 1/2 \$3.50 'r.m. (2)	
Baeder & Adamson's Flint, Assort'd 4 7/8 'r.m. (2)	
Baeder & Adamson's Star.....	dis 3.75 'r.m. (2)
Baeder & Adamson's Emery 'r.m. \$5.00 @ 11.50	
J. Bartle's Sand, Flint and Emery Paper.....	dis 30 & 5
SASH CORD.	
Common.....	dis 14c, net
Patent.....	dis 17c @ 18c, net
Silver Braided Lake Hemp.....	dis 50c, dis 10
Silver Braided Lake White Cotton.....	dis 50c, dis 10
Silver Braided Lake Drab Cotton.....	dis 50c, dis 10
Silver Lake Cable Laid, Bengali unbleached	
Hemp, 17 cts.....	dis 10
Russian Hemp, 19 cts.....	dis 10
Italian Hemp, 34 cts.....	dis 10
SASH WEIGHTS.	
Solid Eyes, in 500-lb. lots and over.....	dis 1 1/2 c, net
SAUSAGE STUFFERS OR FILLERS.	
Miles.....	dis 25
Perry.....	dis 25
Enterprise Mfg Co.....	dis 25
Monarch.....	dis 40
SAWS.	
Boynton's Lightning Cross Cuts, new list, dis 40	
Boynton's Circular and Mill.....	dis 40
Boynton's Ice.....	dis 25
Boynton's Lightning Hand, Panel and Rip.....	dis 25
Disston's Circular.....	dis 40
Disston's Mill.....	dis 40
Disston's Cross Cut.....	dis 40
Disston's Hand, Panel, Rip, &c.....	dis 30
Hubbard, Bakewell & Co. Cir. Saws.....	dis 40 & 5
Hubbard, Bakewell & Co. Cross Cut.....	dis 40
Hubbard, Bakewell & Co. One-Man's, X Cut.....	dis 40 & 5
Hubbard, Bakewell & Co. Mill Saws.....	dis 40 & 5
Peace Circular and Mill.....	dis 40
Peace Hand, Panel and Rip.....	dis 25
Peace Cross Cuts.....	dis 35
Peace Band Saws, all widths.....	dis 10
Webster Cross Cut, with Handles.....	dis 25 & 10
Griffin's Hack Saws and Blades.....	dis 30
SAW FRAMES.	
White.....	dis 1.05, dis 10
Saw Rods.....	dis 1.10, dis 10 & 10
SAW SETS.	
Stillman's Genuine.....	dis 3.50 and 3.50, dis 10
Stillman's Imitation.....	dis 3.25, dis 30 & 10
Common Lever.....	dis 3.00, dis 30 & 10
Leach's.....	No. 0, \$3.00; No. 1 \$1.15; dis 15
Hammer, Hotchkiss.....	dis 5.50, dis 10
Alken's Genuine.....	dis 13.00, dis 50 & 10
Alken's Imitation.....	dis 7.00, dis 50
Disston's.....	No. 1, \$1.15; No. 5, \$2.25, dis 35 & 10
Morrill's.....	No. 1, \$1.15; No. 5, \$2.25, dis 35 & 10
SCALES.	
Hatch, Counter, No. 171.....	dis 12, dis 37 & 10
Hatch, Tea, No. 161.....	dis 15.00, dis 37 & 10
Salon Platform, Keystone.....	dis 80, dis 45

Chicago Scale Co.	
Fairbanks.....	Special dis
Forsyth Scale Co.....	dis 30
Howe's.....	dis 45
Chapin's Eureka.....	dis 20 & 10
Chapin's Grocers.....	dis 40
Family Universal.....	dis 25
Family Favorite.....	dis 30
Family Turnbull's.....	dis 30
Scale Beams, List of Jan. 12, 1892.....	dis 50
SCREW DRIVERS.	
Douglas Mfg Co.....	dis 30 & 10
Disston's.....	dis 40
Cowles Mfg Co.....	dis 50 & 10
Stanley Rule & Level Co.'s Var. Hds.....	dis 50 & 10
Stanley Rule & Level Co.'s B's Hds.....	dis 40 & 10
Hatchet.....	dis 33
Clark's Patent.....	dis 25
Shepardson.....	dis 25
SCREWS.	
Flat Head Iron, List Dec. 27, '92.....	dis 70
Round Head Iron.....	dis 50
'Flat Head Brass.....	dis 60
Round Head Brass.....	dis 65
Flat Head Blue add 2 1/2 c to net of invoice.....	
Brass and Silver Capped.....	dis 40
Japanned, list of Plain Screws.....	dis 30
Coach, Patent Gimlet Point.....	dis 60 & 10
Coach, Common or Lag.....	dis 60 & 10
Bed.....	dis 10
Machine, Flat Head, Iron.....	dis 50
Machine, Round Head, Iron.....	dis 50
Bench, Iron.....	dis 50 & 10
Bench, Wood, Beech.....	dis 30
Bench, Wood, Hickory.....	dis 30 & 10
Hand, Wood.....	dis 20 & 10
Hand, Sargent's.....	dis 60 & 10
Hand, Rail, Humason, Beckley & Co.'s.....	dis 40 & 10
Hand, Rail, A. M. Screw Co., list Jan. 1, '91.....	dis 70
Jack (Wilson's).....	dis 25
SCREEN FRAMES AND FIXTURES.	
Standard Window Screens No. 1.....	dis 40
Door.....	dis 40 & 10
Window Corner Irons, No. 3, doz. 1/2 in. \$3	
Door.....	dis 40 & 10
Door Latches, 1/2 dozen, \$3.90; dis 50	
Porter's Patent Window and Door Screen Frames:	
1 in. White.....	\$2.75
1 in. Walnut.....	\$3.25
No. 20.....	3.25
No. 21.....	4.00
No. 22.....	5.50
No. 23.....	6.00
No. 30.....	10.00
PORTER'S CORNERS AND STICKS.	
No. 0, Corners and Sticks complete for a	
three-foot window, 1/2 doz. sets.....	\$4
No. 1, Set for Window, 1/2 doz. sets, Bronze.....	\$3.40; Nickel, \$5.62
No. 1 1/2, " " 1/2 doz. sets, Bronze.....	\$3.25; Nickel, \$7.50
No. 4, " " 1/2 doz. sets, Bronze.....	\$1.00; Nickel, \$5.00
No. 4 1/2, " " 1/2 doz. sets, Bronze.....	\$1.30; Nickel, \$3.00
No. 4 1/2, " " 1/2 doz. sets, Bronze.....	\$2.00; Nickel, \$4.00
No. 2 1/2, " " 1/2 doz. sets, Bronze.....	\$6.75; Nickel, \$15.00
No. 3, " " 1/2 doz. sets, Bronze.....	\$12.00; Nickel, \$34.00
SHOVELS AND SPADES.	
Ames, New List, July 1, 1891.....	dis 15
Griffiths.....	dis 50 & 5
Remington's (Lowman's Patent).....	dis 30
Kimball's.....	dis 30
Lippincott, new list.....	dis 30
Huesy, Bins & Co.....	dis 15
SHUTTER HINGES.	
Clark's Improved Shutter Hinges, Nos. 0, 1, 1 1/2, 2,	
2 1/2, 3.....	dis 75
Iron and Brass Head, R. & E. List.....	dis 60 & 10
Polished Steel, New List.....	dis 50 & 10
SLEIGH BELLS.	
Arctic and Pol r.....	dis 30
Loose and neck and body strap.....	dis 50
SPOKE TRIMMERS.	
Bonney's.....	dis 10, dis 40 & 5
Stearns.....	dis 20, dis 20 & 10
Ives.....	No. 1, \$1.15; No. 2, \$1.12 1/2; dis 55 & 10
Douglas.....	dis 90, dis 15
SILVER-PLATED WARE.	
Wm. Rogers Manf. Co.....	dis 50, 10, 5 & 5
Holmes, Booth & Hayden.....	dis 40 & 10
Brown Bros.....	dis 40 & 10
Wallace's Steel Silver Plated.....	dis 38 1/2
Rogers Bros 1847.....	dis 50
C. Rogers & Bro.....	dis 40, 10 & 5
SILVER-PLATED HOLLOW WARE.	
Wm. Rogers Manf. Co.....	dis 40, 15 & 5
Meriden Britannia Co.....	dis 38 1/2
SPOONS.	
Britannia.....	dis 60 & 10
Tinned, Iron, Table and Tea.....	dis 65
Tinned Iron Basting.....	dis 65
German Silver.....	dis 40, 12, 1, 2 & 5
STONE.	
Hindustan No. 1, 5c; Axe, 8c.....	net
Sand Stone.....	dis 6c, dis 33 1/2 & 10
Washita Stone.....	No. 1, 1/2 lb., 18c, net
Washita Stone, Slips.....	No. 1, 1/2 lb., 45c, net
Arkansas.....	\$1.50 1/2 lb., net
SQUARES.	
Steel.....	dis 50; full cases, dis 50 & 10
Iron.....	dis 50; full cases, dis 50 & 10
Nickel Plated.....	add \$3.50 @ 4 doz., net
Try Square and T Bevels.....	dis 50 & 10
Disston's Try Square and T Bevels.....	dis 40
WIRE.	
Solid Box—Wilson's.....	dis 50
" Trenton.....	dis 45
" Iron City Tool Works.....	dis 50
Bench—Wilson's.....	dis 45
" Trenton.....	dis 25
" Parker.....	dis 30
" Frontiers.....	dis 35
" Bonney's.....	dis 35
Well Wheels.....	dis 60 & 10

WIRE.	
Brass and Copper, list of Jan. 17, 1894.....	dis 15
Bright and Annealed.....	Nos. 0 @ 18, dis 50 & 10
Bright and Annealed.....	Nos. 19 @ 26, dis 60 & 10
Bright and Annealed.....	Nos. 27 @ 36, dis 70
Coppered.....	Nos. 0 @ 18, dis 50
Galvanized, Nos. 0 to 18.....	market list dis 40
Tinned, Nos. 0 to 18.....	dis 60
Tinned Broom Wire, Nos. 18 to 25.....	dis 60
Annealed Fence, Nos. 8 & 9.....	dis 55
Annealed Grape, Nos. 10 to 14.....	dis 50 & 10
Fence Staples, Galvanized.....	dis 70 & 7 1/2 c
Japanned Barb Fence.....	dis 6 c
Galvanized Barb Fence.....	dis 6 1/2 c
Buck Thorn Galvanized.....	dis 7 c
Picture Wire.....	dis 40
Clothes Line Wire, Galvanized.....	\$3.00 1/2 doz
Wire Cloth, green, drab and black.....	dis 2 1/2 c net
WRENCHES.	
American Adjustable.....	dis 45
Baxter's Adjustable "S," list Jan., 1890.....	dis 30 & 5
Baxter's Diagonal.....	dis 30 & 5
Cox's Genuine.....	dis 50 & 10
Cox's "Mechanics".....	dis 50 & 10
Cox's Pattern, Malleable.....	dis 60 & 10
Cox's Pattern, Wrought.....	dis 60 & 10
Girard Standard.....	dis 50 & 10
Girard Agl.....	dis 60 & 10
Always Ready.....	dis 25
WINNERS.	
Universal, XX, No. 2 1/2.....	dis 36.00
Universal, XX, No. 2.....	dis 42.00
Universal, XX, No. 1 1/2.....	dis 51.00
Universal, XX, No. 1.....	dis 66.00
Universal, XX, No. 8.....	dis 10.75
Universal, XX, No. 12.....	dis 30.25
Universal, XX, No. 18.....	dis 22.75
Universal, XX, No. 22.....	dis 30.25
Peerless, with Cogs, No. 1.....	dis 42.00
Peerless, with Cogs, No. 2 1/2.....	dis 45.00
Peerless, with Cogs, No. 3.....	dis 48.00
THERMOMETERS.	
Tin Case.....	dis 7 & 10
Storm Glasses.....	dis 3.25 1/2 doz.
TACKS, BRADS & C.	
New List, Sept. 1, 1892.....	
Tinned Swedes Tacks.....	dis 30
Tinned American Tacks.....	dis 30
Swedes Tacks, all kinds.....	dis 30
American Cut Tacks.....	dis 30
Copper Tacks and Nails.....	dis 30
Hungarian Nails.....	dis 35
Gimp and Lace Tacks.....	dis 30
Gimp and Lace Tacks, Tinned.....	dis 30
Finishing Nails.....	dis 25
Trunk and Clout Nails.....	dis 25
Common and Patent Brads.....	dis 30
Bracket Nails.....	dis 30
Leathered Carpet Tacks.....	dis 30
Cigar Box Nails.....	dis 30
Chair Nails.....	dis 30
Double-pointed Tacks.....	dis 40 & 5
TAP BORERS.	
Common and Ring.....	dis 30
Ives' Tap Borers.....	dis 15 & 10
Enterprise Mfg. Co.....	dis 25
TOBACCO CUTTERS.	
Enterprise Mfg. Co. (Champion).....	dis 25
Wood Bottom.....	dis 12.00, dis 40 & 5
All Iron.....	dis 3.50, dis 40 & 5
Wilson's.....	dis 35
TOE CALKS.	
Winsted.....	dis 9c, dis 5
TRAPS.	
Game, Newhouse.....	dis 35
Game, Onelda Pattern.....	dis 60 & 10
Game, Blake's Patent.....	dis 40 & 10
Mouse, Wood, Choker.....	dis 16c
Mouse, Round Wire.....	dis 15.50, dis 10
Mouse, Cage, Wire.....	dis 2.50, dis 10
Mouse, Catch-em-alive.....	dis 2.50, dis 10
Rat, "Decoy".....	dis 10.00, dis 10
Delusion Mouse, per doz.....	\$1.50
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TOWELS.	
Lothrop's Brick and Plastering.....	dis 25
Reed's Brick and Plastering.....	dis 15
Diaston's Brick and Plastering.....	dis 30
Clement & Maynard's.....	dis 30
Worrall's Brick.....	dis 30
Brades & Walby's.....	dis 30
Garden.....	dis 55
TRUCKS (WAREHOUSE, &C).	
Handy Truck.....	\$3.50 net
Penfield Block Co.'s list, 1892.....	dis 35
Peerless, with Cogs, No. 3.....	dis 54.00
Peerless, with Cogs, No. 4.....	dis 66.00
Eureka, No. 2.....	dis 42.00
MISCELLANEOUS.	
"Diamond" Vegetable Grater.....	\$5.00 1/2 doz., 10
Rotary Knife Potato Parer.....	\$18.00 1/2 doz., net
Metallic Shingles.....	\$5.50 and \$6.50 per square.

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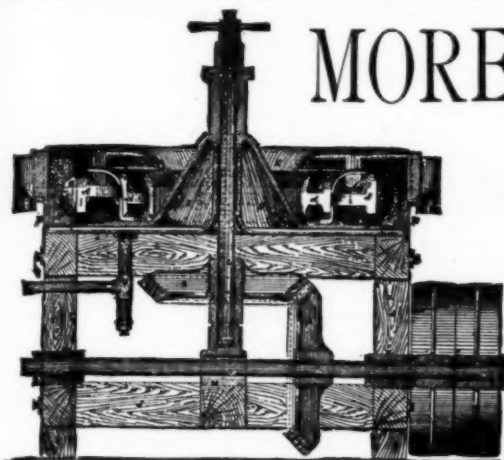
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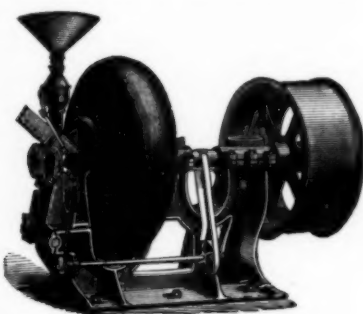
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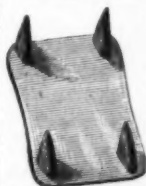
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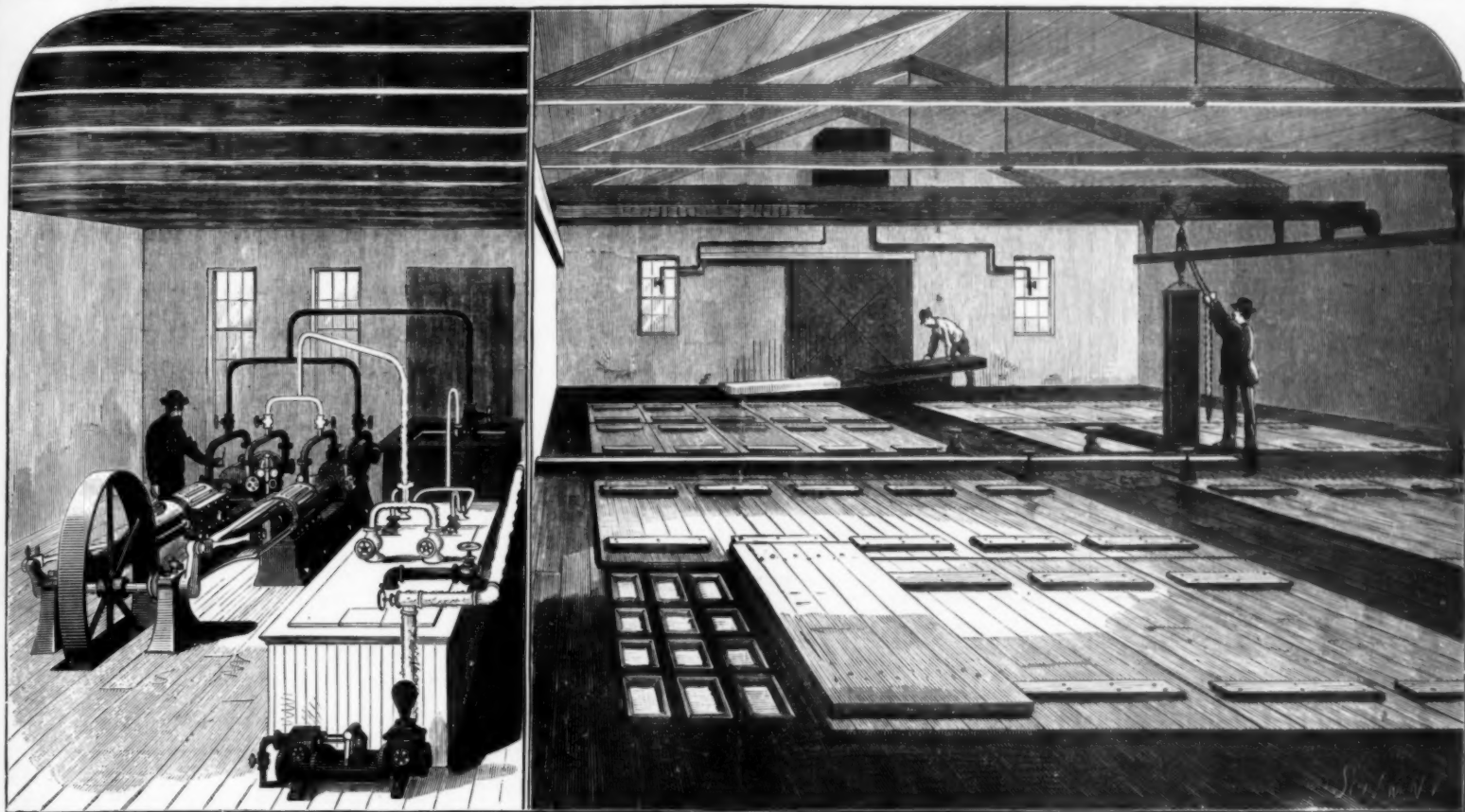


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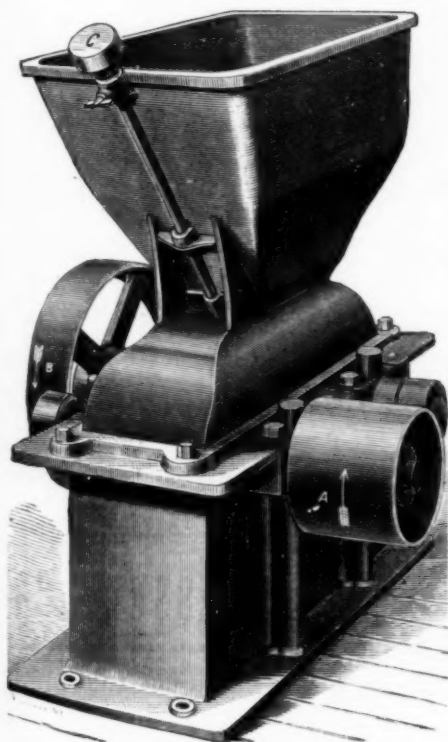
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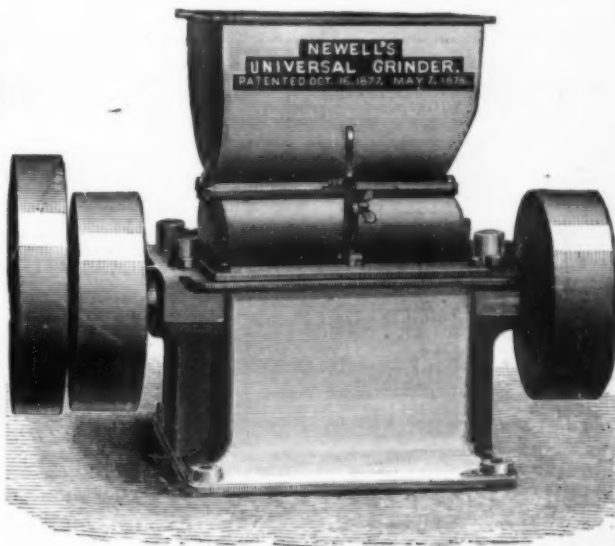
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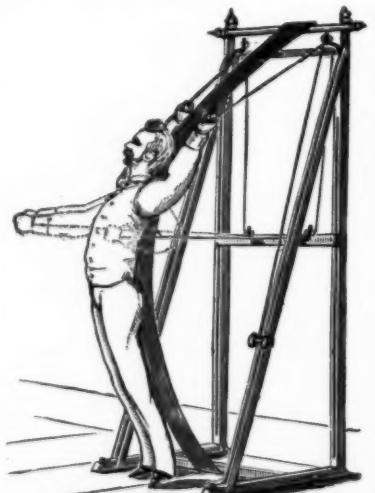


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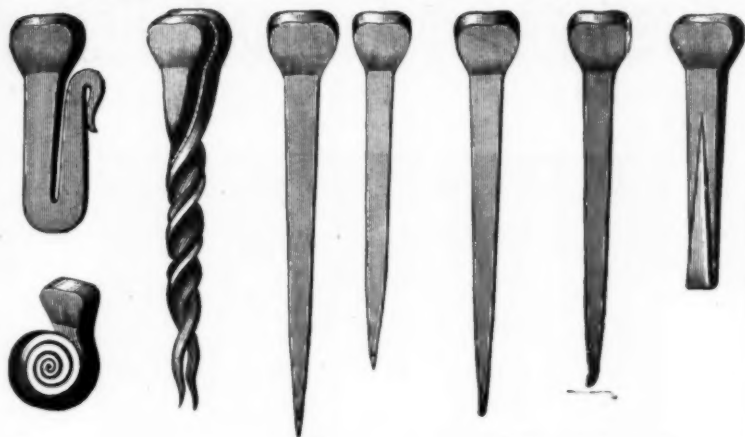
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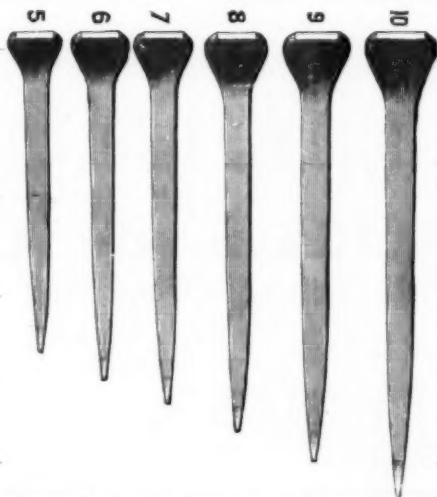
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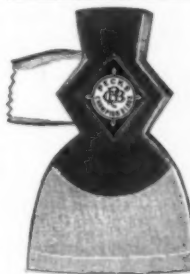


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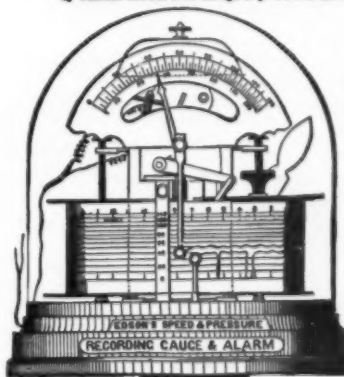
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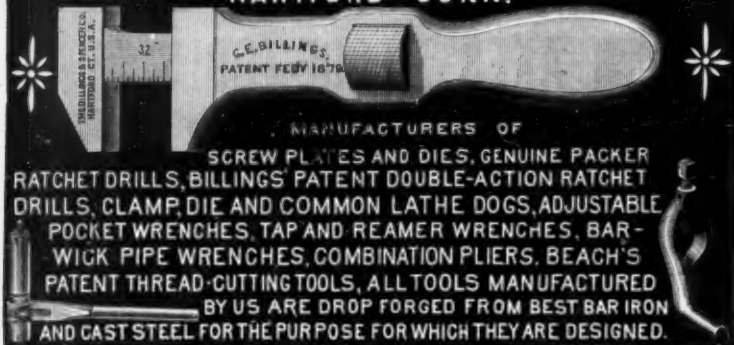
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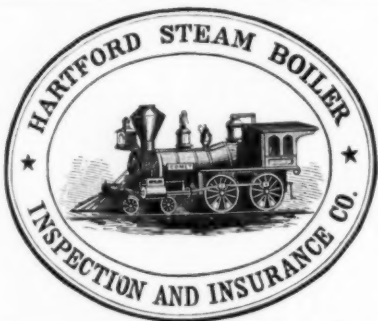
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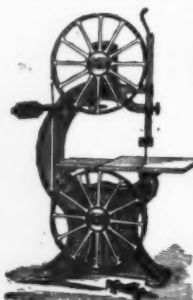
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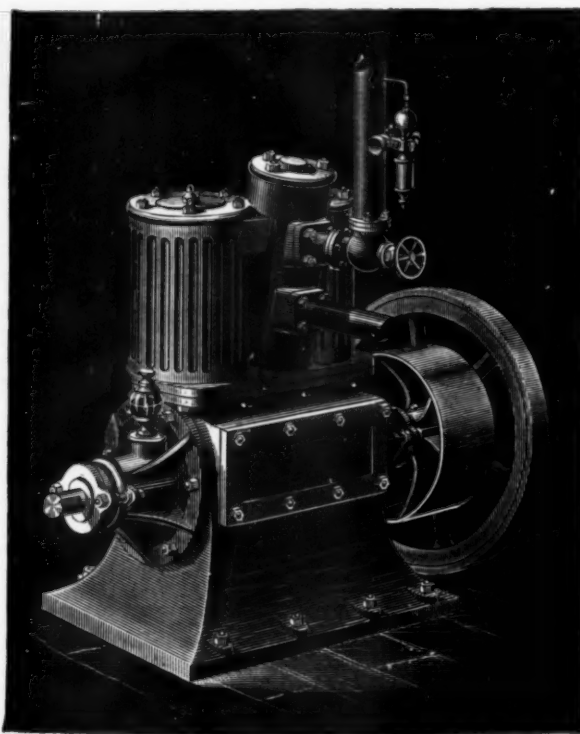
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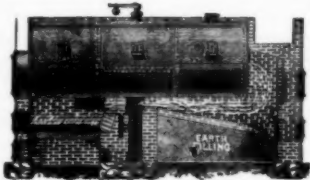
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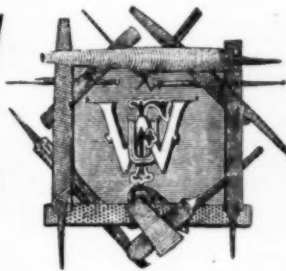
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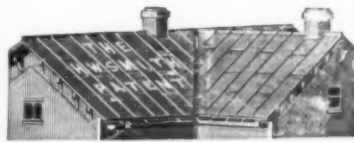
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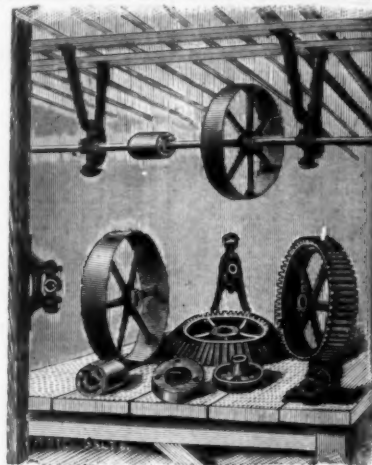
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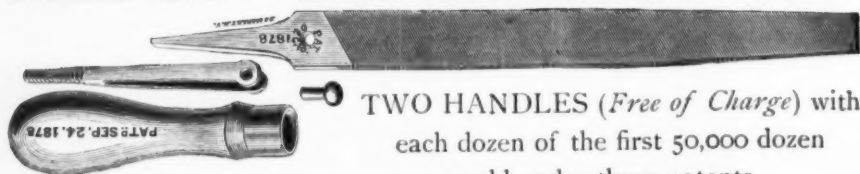
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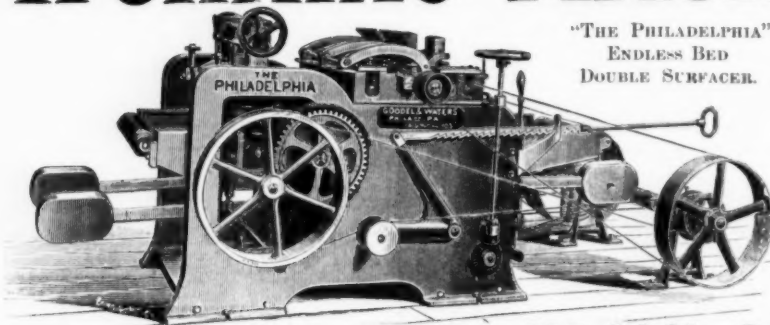
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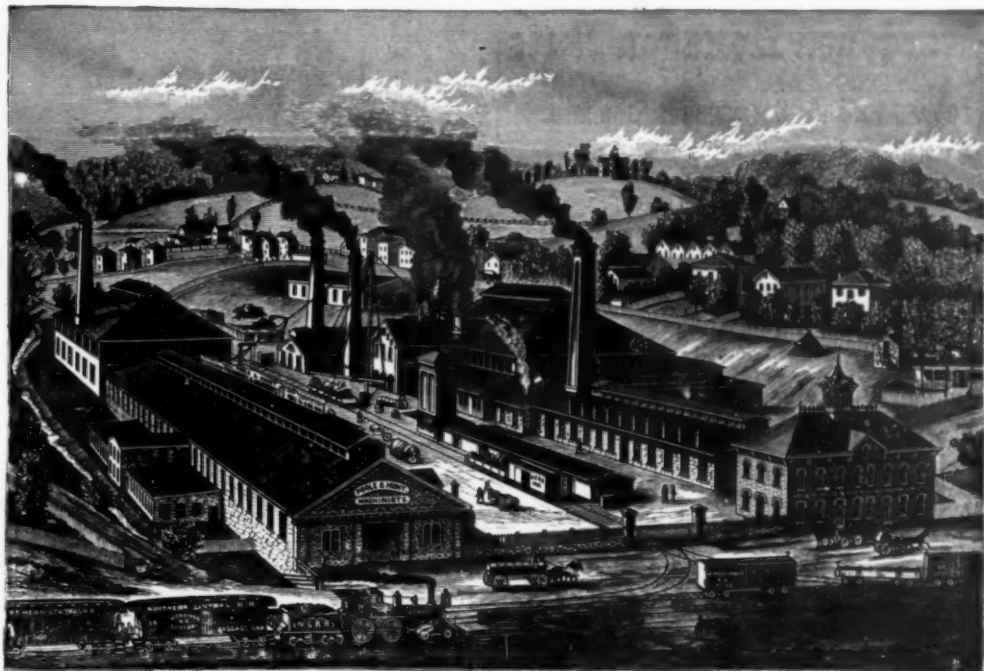
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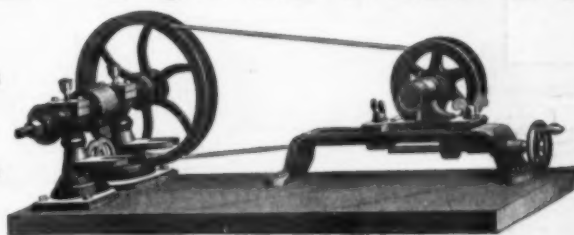
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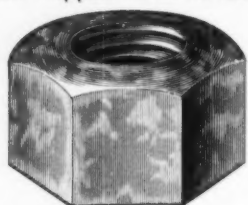
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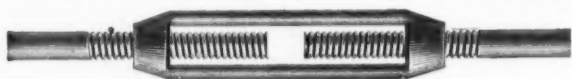
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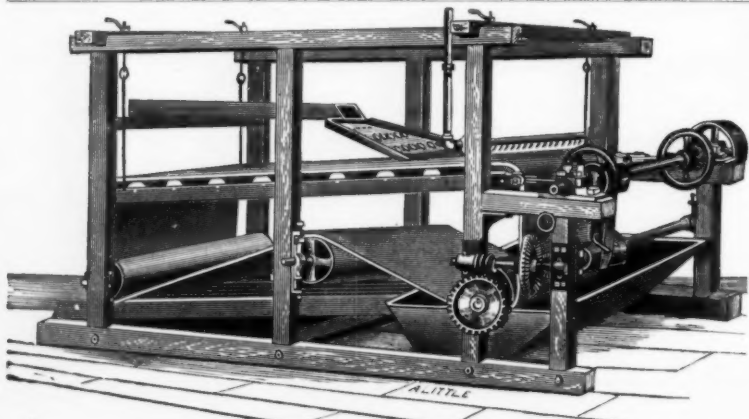
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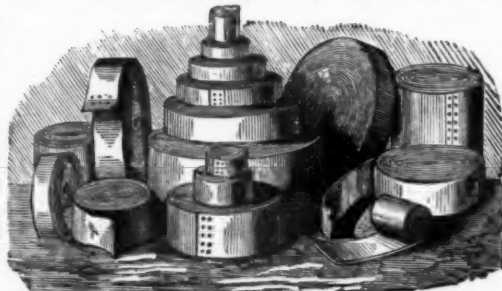
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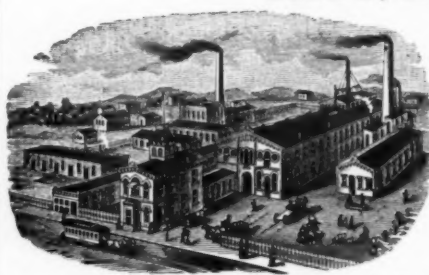
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